

**NEW PROGRAM PROPOSAL FORM**

**Sponsoring Institution(s):** Lindenwood University

**Program Title:** COMPUTER INFORMATION SYSTEMS

**Degree/Certificate:** BACHELOR OF SCIENCE

**CIP Classification**110501 (Please provide a CIP code)

**Implementation Date:** August 2003

**Expected Date of First Graduation:** MAY 2007

**AUTHORIZATION**

Jann Weitzel/ VP for Academic Affairs

Name/Title of Institutional Officer	Signature	Date
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Jann Weitzel, Ph.D.	636-949-4846	
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Person to Contact for More Information	Telephone	
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BACHELOR OF SCIENCE  
IN  
COMPUTER INFORMATION SYSTEMS

A Proposal Submitted to the  
Coordinating Board for Higher Education

By

Lindenwood University

## **MISSION AND PLANNING PRIORITIES**

Lindenwood University is an independent, liberal arts university serving nearly 15,000 students in a broad range of academic programs. The proposed Bachelor of Science in Computer Information Systems will be offered through Lindenwood University's Division of Sciences. It will serve that audience of students who wish to pursue an undergraduate degree in computer science with an emphasis on business operation in an academic, liberal arts setting. The Bachelor of Science in Computer Information Systems is both compatible and consistent with the goals and objectives of the Division of Sciences and the mission of the University.

## **NEED FOR THE PROPOSED PROGRAM**

The U.S. Department of Labor consistently produces reports that indicate a continuing and growing use of computers and computer systems relate to the operations of businesses both large and small. All reports indicate that the need for specially trained individuals on the applications of computers and computer systems in a business setting continues to be a vital component of all business. Lindenwood University recognizes the need for an academic program that prepares students to for a career I the area of business related computer applications.

The University's Bachelor of Science in Computer Information Systems will consist of a blend of courses that provide students with a sound underpinning in core computer science subjects with those business courses that provide the student with a basic understanding of the specialization and unique issues facing the business community.

The Bachelor of Science in Computer Information Systems will also provide students with the necessary core knowledge and experience to continue their study of computer science at the post-graduate level.

## **FACULTY RESOURCES**

The Computer Science faculty of the School of Sciences includes the following full- and part-time instructors:

### **Blythe, Stephen A. (2009)**

Associate Professor of Computer Science  
B.S., University of Delaware; M.S., Ph.D., Rensselaer  
Polytechnic Institute

### **Dey, Sajalendu (2004)**

Professor of Physics and Pre-Engineering  
B.S., Dhaka University, Ramna Dhaka, Bangladesh; M.S., Brock  
University, St. Catharines, Ontario; M.S., University of Missouri-  
St. Louis; M.S., Bangleshi University, Bangladesh; Ph.D., Iowa  
State University

**Golik, Wojciech L. (2001)**

Professor of Mathematics and Chair, Department of Mathematics  
B.S., M.S. Poznan University of Technology, Poznan, Poland;  
M.S., Ph.D., New Mexico State University

**Soda, Dominic (1969)**

Professor Emeritus of Mathematics and Computer Science  
B.S., Queen's University; M.Sc., University of Missouri-Rolla;  
Ph.D. Yale University

**Van Dyke, C. Renee (2001)**

Associate Professor of Mathematics and Computer Science and  
Chair, Department of Computer Science  
B.S., Towson State University; M.S., Midwestern State  
University

**PROGRAM STRUCTURE**

**Bachelor of Science in Computer Information Systems**

The Bachelor of Science Degree in Computer Information Systems will accept any student who meets the University's admission requirements.

The degree is offered in a 128 hour program consisting of: 49 credit hours of general education requirements (required of all Lindenwood students), 30 credit hours of required computer science course, six credit hours of elective computer science courses, six credit hours of basic mathematics courses, 15 credit hours of business relate courses, and 22 credit hours of free electives.

**Required Computer Science Courses are:**

CSC 10000, Introduction to Computer Science  
CSC 14400, Computer Science I  
CSC 18400, Computer Science II  
CSC 30500, Principles of Database Systems  
CSC 32000, UNIX Workshop  
CSC 34000, COBOL Programming  
CSC 40200, Visual Basic Programming or CSC 41000, JAVA Programming  
CSC 42500, Advanced Database Design  
CSC 44700, Project Management and Practice

**Approved Computer Science elective Courses are (six credit hours):**

CSC 25500, Assembly Language Programming  
CSC 36000, Data Structures  
CSC 38000, Telecommunications and Computer Networking  
CSC 40300, Computer Architecture

CSC 40500, Computer Graphics  
CSC 40600, Operating Systems  
CSC 40800, Organization of Programming Languages  
CSC 40900, Topics in Computer Science

**Required Mathematics Courses are:**

MTH 13100, Quantitative Methods  
MTH 14100, Basic Statistics

**Required Business Courses are:**

BA 20000, Principles of Financial Accounting  
BA 20100, Principles of Managerial Accounting  
BA 21000, Survey of Economics  
BA 33000, Principles of Management  
BA 33100, Organizational Behavior and Development

**STUDENT ENROLLMENT PROJECTIONS**

Year	2007	2008	2009	2010	2011
Full Time	8	16	25	38	45
Part Time	0	2	4	5	5
Graduates	1	3	4	6	8

**LIBRARY RESOURCES**

The Butler Library on the campus of Lindenwood University has adequate resources to support existing bachelor degrees. There is easy access to the Internet and other electronic resources. Additionally, materials can be secured through inter-library loan.

**ADMINISTRATION AND EVALUATION**

The Dean of the Division of Sciences will direct the Bachelor of Science in Computer Science with the assistance of the Program Manager of Computer Science..

Evaluation will involve faculty assessment of students, student assessment of faculty, course assessment by both faculty and students, program assessment by students, faculty, employers, and interaction with the professional community. Assessment of

students will include, but is not limited to, quizzes, examinations (oral and/or written), projects/computer programs, papers, oral presentations, and class participation. Data on placement and professional advancement of the program's graduates will also be part of the evaluation process. Assessment procedures will result in program modification as needed.